Contents Volume 12, 1974

Soviet pedology to the 10th International Congress of Soil Science (the centenary of soil science in Russia)
V.A. Kovda and G.V. Dobrovolsky (Moscow, U.S.S.R.) 1

The age of recent soils
I.P. Gerasimov (Moscow, U.S.S.R.) 17

Main concepts of soil ecology
V.R. Volobuyev (Baku, U.S.S.R.) 27

Structure of the soil mantle
V.M. Fridland (Moscow, U.S.S.R.) 35

Enzymatic activity of soils
A.Sh. Galstian (Yerevan, U.S.S.R.) 43

A tentative study of clay mineral distribution in soils of the world
B.P. Gradusov (Moscow, U.S.S.R.) 49

Biogeochemical factors in the formation of terra rossa in the southern Crimea
M.A. Glazovskaya and E.I. Parfenova (Moscow, U.S.S.R.) 57

Clay minerals in yellow-podzolic soils of western Georgia
N.G. Zyrin, L.I. Gavva, T.A. Sokolova and M.I. Guseva (Moscow, U.S.S.R.) . . 83

Major kinds of gley soils of the tundra and northern taiga regions in the Soviet Union
N.A. Karavayeva (Moscow, U.S.S.R.) 91

Cryogenic processes in the soils of northern Asia
O.W. Makeev and A.S. Kerzhentsev (Moscow, U.S.S.R.) 101

Thermal and moisture regimes in a soil profile affected by prolonged seasonal freezing (middle taiga subzone, West Siberia)
N.M. Fedorova (Moscow, U.S.S.R.) 111

Neubildungen hydromorpher Mineralböden der UdSSR, ihre Klassifikation und diagnostische Bedeutung (Neoformations in hydromorphic mineral soils of the U.S.S.R., their classification and diagnostic significance)
F.R. Zaidelman (Moscow, U.S.S.R.) 121

Facies-provincial subdivisions of soils on a thermal basis
V.N. Dimo and N.N. Rozov (Moscow, U.S.S.R.) 137

Role of microorganisms in iron mobilization and stabilization in soils
T.V. Aristovskaya (Leningrad, U.S.S.R.) 145

The principal directions of experimental investigations in soil algology with emphasis on the U.S.S.R.
E.A. Shtina (Kirov, U.S.S.R.) 151

The use of resins in the investigation of dynamics of nutrients in soils
L.O. Karpachevsky and N.P. Orekhova (Moscow, U.S.S.R.) 157

Use of spectral methods in soil science and agrochemistry in the Soviet Union
D.N. Ivanov and L.A. Lerner (Moscow, U.S.S.R.) 163

Coordinate-statistical approach to the objective classification of soils
V.A. Rozhkov (Moscow, U.S.S.R.) 175

The energy state of soil moisture as related to soil fabric
A.D. Voronin (Moscow, U.S.S.R.) 183

Sangamon paleosols of southwestern Indiana, U.S.A.
R.V. Ruhe, R.D. Hall and A.P. Canepa (Bloomington, Ind., U.S.A.) 191

Determination of sub-microquantities of ammonium and nitrates in soils with phenol, sodiumnitroprusside and hypochlorite
A.J. Kempers (Nijmegen, The Netherlands) 201

Redoxpotentiale und Redoxprozesse von Mangan-, Eisen- und Schwefelverbindungen in hydromorphen Böden und Sedimenten (Redox potentials and redox processes of manganese, iron and sulphur compounds in hydromorphic soils and sediments)
G. Brümmer (Kiel, Germany) 207

Sorption of phosphate by aluminium and iron(III)-hydroxy species on mica surfaces
K.W. Perrott, A.G. Langdon and A.T. Wilson (Hamilton, New Zealand) 223
Weathering and mobility sequence of minor elements on a basaltic pedomorphic surface, Galilee, Israel
D.H. Yaalon, I. Brenner (Jerusalem, Israel) and H. Koyumdjisky (Bet Dagan, Israel) 233
Comparative micromorphology of some soil types of Lower Egypt
F.H. Abdel-Kader and N.E. Abdel-Hamid (Alexandria, Egypt) 245
Fifty years progress in soil physics
J.R. Philip (Canberra City, A.C.T, Australia) 265
A few aspects of 50 years of soil chemistry
A.C. Schuffelen (Wageningen, The Netherlands) 281
Die Geschichte der Bodenzoologie und ihre Einbeziehung in die bodenkundliche Forschung (The history of soil zoology and its place in soil science research)
H. Franz (Vienna, Austria) 299
Trends and advances in soil microbiology from 1924 to 1974
J. Macura (Prague, Czechoslovakia) 311
Progrès réalisés dans la fertilité du sol et la nutrition des plantes (Advances in soil fertility and plant nutrition)
O.T. Rotini and P. Sequi (Pisa, Italy) 331
Soil genesis, classification, and cartography: 1924—1974
C.E. Kellogg (Hyattsville, Md., U.S.A.) 347
The role of Commission VI during the last 50 years
E.W. Russell (Reading, Great Britain) 363
Addendum (Subcommission on Salt Affected Soils)
I. Szabolcs (Budapest, Hungary) 383
From mutable compounds to soil minerals
L. van der Plas (Wageningen, The Netherlands) and
L.P. van Reeuwijk (Utrecht, The Netherlands) 385

23

33

45

55

61

69

71

81

87

93

93

05

VO

AN